

REMARKS

Claims 1-48 are pending in the instant application. In the outstanding Office Action, the examiner rejects all claims as being obvious, and objects to informalities in claims 1 and 13. The above amendments address the informality objections, and the below arguments rebut the examiner's obviousness rejections.

The Combination of Suzuki and Fontenot

Claims 1, 4, 5, 9, 23, 26, 37, and 46 stand rejected as being obvious under 35 U.S.C. § 103(a) over U.S. 6,490,264 to Suzuki, in view of U.S. 4,616,359 to Fontenot. As explained below, all such rejections must be withdrawn as a matter of law because the combination of Suzuki and Fontenot does not teach the claimed invention, and because the motivation of one skilled in the art to combine Fontenot with Suzuki is utterly lacking. Indeed, combining the teachings of Fontenot with Suzuki would destroy the essential function of Suzuki.

First, the applicant notes that the claims rejected under the combination of Suzuki and Fontenot include all of the instant application's independent claims, namely claims 1, 23, and 37. Claims 1, 23, and 37 are directed to methods or apparatus wherein radio base stations and a base station controller are interconnected as nodes via a daisy-chained shared communication link. In claims 1 and 23, a first priority queue schedules transmission of packet data sent between two nodes in the chain according to a priority determined as a function of the terminating node for each data packet. (Note that claim 37 does not explicitly name a first priority queue, but it functionally claims location-dependent scheduling in a manner consistent with the other independent claims.)

Referencing claim 1, for example, the examiner uses Suzuki as the primary reference, arguing that it teaches daisy-chained base stations and base station controllers, and uses Fontenot as the secondary reference, arguing that it teaches the use of a first priority queue scheduling transmissions between nodes according to a location-based priority. The context of Fontenot differs substantially from that of Suzuki, and Fontenot addresses a problem that is inapplicable to Suzuki—thus, the motivation of one skilled in the art to combine Fontenot with Suzuki is utterly lacking.

However, setting that failing aside for the moment, Fontenot explicitly does not teach a first priority queue providing location-dependent priority scheduling within the meaning of any of the pending claims. More to the point, the examiner's statement that Fontenot discloses the claimed prioritization scheduling is contradicted by the plain language of Fontenot.

For example, the examiner states that the abstract of Fontenot teaches a first priority queue within the meaning of the instant application's claims. In actuality, Fontenot's abstract teaches the use of "adaptive preferential packet" processing through a packet data network, wherein packet data is allowed to enter the network only where there is a permit packet indication that the packets are likely to be delivered. The abstract of Fontenot states that the motivation for selectively enabling the entry of such packet data into the network conditioned on an indication of its likelihood of being delivered is reduced buffer size requirements at the switch nodes comprising the packet data network.

Indeed, the use of "permit packets" is the central teaching of Fontenot. To avoid wasting network resources by carrying general packet data that, ultimately, will not be

delivered to its intended destination node, Fontenot first sends a permit packet through the network to the destination node. If the destination node returns a corresponding permit-return packet, the general packet data for that destination node is then sent. To make this scheme effective, Fontenot prioritizes routing of the permit and permit-return packets, meaning that those special packet types receive priority routing, which makes sense, since the decision to allow “regular” packet data into the network of routing nodes depends on the successful sending and receiving of permit and permit-return packets.

The examiner’s obviousness arguments do not even acknowledge these key teachings of Fontenot. Simply put, Fontenot teaches defining new packet data types (permit packets and permit-return packets) as a gating mechanism to avoid routing regular data packets through a packet network to a node that is not available for receiving them. Fontenot teaches nothing about the prioritization of regular data packets based on the location of a node within a daisy chain of nodes, as is claimed. (For the record, the packet data networks of Fontenot can have any number of parallel and series nodes, and the notion of “daisy chained” nodes in the context of Fontenot is meaningless.)

Even more remarkably, the express purpose of Fontenot is to use the disclosed permit-based prioritization scheme to prevent the admission of packet data into the packet network absent the indication of a likelihood of delivery to the destination. Such teachings are completely inapplicable to the series-connected controller and base stations of Suzuki, wherein the data being carried along the series of nodes must be delivered up or down the series of nodes. That is, all data intended for the last base

station in the series chain must be routed down to it through each intermediate node, and all data from that last base station must be routed up through each intermediate node to the controller. The notion of creating permit and permit-return packets as taught by Fontenot to determine whether such data will even be routed through the series of nodes is nonsense—the data has to be routed from node to node or the wireless communication network of Suzuki would fail.

Respectfully, the examiner is asked to carefully reconsider his analysis of Fontenot because his characterization of that reference will be indefensible on appeal. Simply put, Fontenot teaches the creation of permit and permit-return packets as new packet data types that serve as a mechanism for deciding whether to route regular packet data through a packet network. Fontenot does prioritize routing of the permit and permit-return packets, but only because the routing of regular packet routing depends on first sending a permit packet to the destination node, and receiving a permit-return packet from it. Such teachings are inapposite to the operation of Suzuki, have nothing to do with the limitations of the claimed invention, and all rejections based on any combination of Suzuki and Fontenot must be withdrawn for failing as a matter of law.

The Combination of Suzuki and Fontenot, in Further View of Falco

Claims 2, 3, 10, 11, 24 and 25 stand rejected as being obvious under 35 U.S.C. § 103(a) over the combination of Suzuki and Fontenot, in further view of U.S. 6,501,733 to Falco. All such rejections fail as a matter of law because, as detailed in the arguments rebutting the rejections of claims 1, 23, and 37, the examiner's attempted combination

of Suzuki and Fontenot fails as a matter of law. As such, the rejections against claims 1, 3, 10, 11, 24, and 25 must be withdrawn.

The Combination of Suzuki and Fontenot, in Further View of Proctor

Claim 6 stands rejected as being obvious under 35 U.S.C. § 103(a) over the combination of Suzuki and Fontenot, in further view of U.S. 6,125,110 to Proctor. That rejection fails as a matter of law because, as detailed in the arguments rebutting the rejections of claims 1, 23, and 37, the examiner's attempted combination of Suzuki and Fontenot fails as a matter of law. As such, the rejection against claim 6 must be withdrawn.

The Combination of Suzuki and Fontenot, in Further View of Agrawal

Claims 7, 8, and 40 stand rejected as being obvious under 35 U.S.C. § 103(a) over the combination of Suzuki and Fontenot, in further view of U.S. 6,108,316 to Agrawal. All such rejections fail as a matter of law because, as detailed in the arguments rebutting the rejections of claims 1, 23, and 37, the examiner's attempted combination of Suzuki and Fontenot fails as a matter of law. As such, the rejections against claims 7, 8, and 40 must be withdrawn.

The Combination of Suzuki, Fontenot, and Falco, in Further View of Linneweh

Claim 12 stands rejected as being obvious under 35 U.S.C. § 103(a) over the combination of Suzuki, Fontenot, and Falco, in further view of U.S. 5,862,485 to Linneweh. All such rejections fail as a matter of law because, as detailed in the arguments rebutting the rejections of claims 1, 23, and 37, the examiner's attempted combination of Suzuki and Fontenot fails as a matter of law. As such, the rejection against claim 12 must be withdrawn.

The Combination of Suzuki and Fontenot, in Further View of Ofek

Claims 13-16, 20, 27-30, 34, 38, 39, and 43-45 stand rejected as being obvious under 35 U.S.C. § 103(a) over the combination of Suzuki and Fontenot, in further view of U.S. 6,778,536 to Ofek. All such rejections fail as a matter of law because, as detailed in the arguments rebutting the rejections of claims 1, 23, and 37, the examiner's attempted combination of Suzuki and Fontenot fails as a matter of law. As such, the rejections against claims 13-16, 20, 27-30, 34, 38, 39, and 43-45 must be withdrawn.

The Combination of Suzuki, Fontenot, and Ofek, in Further View of Pei

Claims 17-19, 22, 31-33, 36, 41, 42, and 48 stand rejected as being obvious under 35 U.S.C. § 103(a) over the combination of Suzuki, Fontenot, and Ofek, in further view of U.S. 6,167,049 to Pei. All such rejections fail as a matter of law because, as detailed in the arguments rebutting the rejections of claims 1, 23, and 37, the examiner's attempted combination of Suzuki and Fontenot fails as a matter of law. As such, the rejections against claims 17-19, 22, 31-33, 36, 41, 42, and 48 must be withdrawn.

The Combination of Suzuki, Fontenot, and Ofek, in Further View of Earnshaw

Claims 21, 35, and 47 stand rejected as being obvious under 35 U.S.C. § 103(a) over the combination of Suzuki, Fontenot, and Ofek, in further view of U.S. 2003/0012212 to Earnshaw. All such rejections fail as a matter of law because, as detailed in the arguments rebutting the rejections of claims 1, 23, and 37, the examiner's attempted combination of Suzuki and Fontenot fails as a matter of law. As such, the rejections against claims 21, 35, and 47 must be withdrawn.

Conclusion

All outstanding rejections are based on one or more combinations of Suzuki and Fontenot. These references cannot be combined because the operation of Fontenot destroys the operation of Suzuki. However, even if Fontenot could be combined with Suzuki, the combination does not teach the instant invention as claimed. As such, all rejections in the outstanding Office Action must be withdrawn. Respectfully, the applicant believes that, based on the above arguments and corrections of claim informalities, all pending claims stand in condition for immediate allowance, and looks forward to the examiner's next correspondence.

Respectfully submitted,

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